MANUFACTURING EXTENSION PARTNERSHIP Success Stories from the Field

ABB

Nevada Management Assistance Partnership

Abb Carson City Implements Lean Techniques To Improve Lead Time

Client Profile:

ABB, headquartered in Zurich, Switzerland, employs approximately 150,000 people worldwide, including 40 people at its 15,000 square foot Carson City, Nevada plant. ABB Carson City manufacturers pH meters, conductivity meters, and sensors.

Situation:

ABB Carson City supplies its customers with its sensors and other products. Recently, financial pressures led ABB to reduce its workforce and transfer costs, such as inventory holding, to its supplier divisions. As such, ABB Carson City faced an ever-increasing pressure to reduce lead times to meet demand. The company contacted the Nevada Manufacturing Assistance Partnership (MAP), a NIST MEP network affiliate, for assistance.

Solution:

MAP worked with ABB Carson City to implement a "flow line" manufacturing operation. Employees received basic lean manufacturing training through ABB, and MAP conducted a value stream mapping (VSM) exercise in April 2002. During a VSM project, company employees learn how to prepare current and future state maps that highlight opportunities for improvements. ABB Carson City's VSM revealed areas for improvement in work-in-process (WIP), product and people travel distance, and changeover time in the test area.

To address the issue of WIP, employees conducted a 5S workplace organization activity, based on the five "S" principles of sort, set in order, shine, standardize, and sustain. ABB Carson City red-tagged obsolete items and created space for a pilot scale plant floor redesign on one product line. Employees also redesigned the assembly process into a cellular flow system for one product line.

With a more efficient flow and less clutter on the shop floor, ABB Carson City was able to perform its operations more effectively and get its products out the door in record times.

Results:

Reduced lead time from three and four weeks to only a few days--a reduction of 64 percent.

Created a more efficient product flow and a cleaner, safer workplace



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environment.

Increased productivity.

Improved customer satisfaction.

Reduced inventory holding costs by expediting product shipments to customers.

Testimonial:

"[Thanks to Nevada Manufacturing Assistance Partnership's assistance] One customer was so surprised by the quick ship time that he questioned the validity of the order he received, since it arrived too quickly to be his custom order."

Joel Blumenthal, Sales Manager

